





# **HB542 Regulatory Advisory Panel (RAP)**

## **Meeting 2 – November 4, 2021**

---

Virginia Department of Environmental Quality  
November 4, 2021

## Announcements

- Wearing a mask is expected during the meeting and recommended throughout the Bank of America building. If you do not have a mask a disposable mask will be provided.
- WIFI Network: 3<sup>rd</sup> Floor Conference Room  
Password: 1111EMain

# Agenda

1. Welcome and Goals for Today
2. Review Meeting Summary for Meeting #1
3. Determining Participants in Planning Process
4. Identifying Water Supply Risks
5. Public Comment
6. Next Steps

## Goals for Today

1. Receive input and make progress on drafting text on one or both of the issues on the agenda
2. Prepare for Meeting #3 by taking your input and providing some draft language

# **Review and Approve Meeting #1 Summary**

## Issue 2: Participation in Regional Planning

## Current Regulatory Language that identifies participants

- **9VAC25-780-40. Program development.**

Local governments shall develop programs for local or regional water plans that are necessary to comply with this chapter. Local governments shall consult and coordinate with all community water systems in the planning area during the preparation of local or regional programs. Community water systems within the planning area shall cooperate and participate with the locality during preparation of the local program.



## HB542 change: Participation in Planning

**§ 62.1-44.38:1.B** *“The regulations shall identify the particular regional planning area in which each locality shall participate and shall state which local stakeholder groups, including local governments, industrial and agricultural water users, public water suppliers, developers and economic development organizations, and conservation and environmental organizations, shall or may participate in coordinated water resource planning.”*

## Alternative 1

- **9VAC25-780-40. Program development.**

Local governments shall develop **regional** programs for ~~local or~~ regional water plans that are necessary to comply with this chapter. Local governments shall consult and coordinate with ~~all community water systems~~ **local stakeholder** groups, including industrial and agricultural water users, public water suppliers, developers, economic development organizations, and conservation and environmental organizations in the planning area during the preparation of ~~local or~~ regional programs. Community water systems and self-supplied users that utilize more than 300,000 gallons in any month including agricultural, industrial, and power generation users within the planning area shall cooperate and participate ~~with the locality~~ during preparation of the ~~local~~ **regional** program. Other stakeholders may participate during preparation of a regional program at the discretion of the region.

## Alternative 2

- **9VAC25-780-40. Program development.**

Local governments shall develop **regional** programs for ~~local or~~ regional water plans that are necessary to comply with this chapter. Local governments shall consult and coordinate with all community water systems and self-supplied users that utilize more than 300,000 gallons in any month including agricultural, industrial, and power generation users in the planning area during the preparation of ~~local or~~ regional programs. Community water systems and self-supplied users that utilize more than 300,000 gallons in any month including agricultural, industrial, and power generation users within the planning area shall cooperate and participate ~~with the locality~~ during preparation of the ~~local~~ regional program. Other stakeholders including but not limited to developers, economic development organizations, and conservation and environmental organizations groups shall also be given the opportunity to participate in the preparation of a regional program. Other stakeholders may participate at the discretion of the region.

## Issue 3: Identification of Region's Water Supply Risks

- What water supply risks should be/shall be considered?
- How should DEQ evaluate that a regional plan adequately identifies the region's water supply risks and proposed strategies?

## Defining “Water Supply Risk”

- “Water scarcity”
- “Water stress”
- “Water risk”
- Water scarcity + water stress = water risk
- Scarcity and stress both directly inform one’s understanding of risks due to basin conditions.

## Defining “Water Supply Risk”

- “Water scarcity” refers to the volumetric abundance, or lack thereof, of freshwater resources/water supply. This is typically calculated as a ratio of human water consumption to available water supply in a given area. Water scarcity is a physical, objective reality that can be measured consistently across regions and over time.

## Defining “Water Supply Risk”

- “Water stress” refers to the ability, or lack thereof, to meet human and ecological demand for water. Compared to scarcity, “water stress” is a more inclusive and broader concept. It considers several physical aspects related to water resources, including water scarcity, but also water quality, environmental flows, and the accessibility of water.
- accessibility of water usually is whether people are able to make use of physically-available water supplies, which is often a function of the sufficiency of infrastructure and the affordability of water, among other things.

## Defining “Water Supply Risk”

- “Water risk” refers to the probability of an entity experiencing a negative water-related event. Water risk is felt differently by every sector of a region or basin and the organizations within them and thus is defined and interpreted differently (even when they experience the same degree of water scarcity or water stress). The extent of risk is a function of the likelihood of a specific challenge occurring and the severity of the challenge’s impact. Flooding, decaying infrastructure, and drought are some examples.



## Current Regulatory Language

9VAC25-780-130. Statement of need and alternatives.

A. A water plan shall determine the adequacy of existing water sources to meet current and projected demand by preparing a clear statement of need that is derived from an evaluation of the information required by 9VAC25-780-70 through 9VAC25-780-110. The statement of need shall contain, at a minimum, a determination of whether the existing source(s) is adequate to meet current and projected demands.

B. If the determination is that the existing source is inadequate to meet projected demands during the planning period, the program shall include an alternative analysis of potential sources that includes the following information:

1. A description of potential water savings from water demand management actions including an estimated volume for each action;
2. A description of potential sources for new supplies including an estimated volume from each source; and
3. A description of potential resource issues or impacts, identified in accordance with 9VAC25-780-140 G, known for each potential new source that any future water project will need to consider in its development.

C. Potential alternatives considered shall include water demand management alternatives as well as more traditional means of increasing supply, i.e., wells, reservoirs, impoundments and stream intakes. Where appropriate, the program shall consider nontraditional means of increasing supplies such as interconnection, desalination, recycling and reuse. The analysis of potential alternatives may include a combination of short-term and long-term alternatives. The result of this analysis shall be provided as part of the submission required by 9VAC25-780-50 C 7.

## HB542 Change

§ 62.1-44.38:1.C.2 “Each locality in a regional planning area shall develop and submit, with the other localities in that planning area, a single jointly produced regional water supply plan to the Department of Environmental Quality (the Department). Such regional water supply plan shall (i) clearly identify the region's water supply risks and (ii) propose regional strategies to address those water supply risks.”

## Water Supply Risks (SWRP) and some others

- Existing sources insufficient to meet current or future demand (deficits)
- Reduction in the ability to meet water supply demands (unmet demand) during short-term droughts (L30) and long-term droughts (L90)
- Reduction in waste assimilative capacity (7Q10)
- Reduction in aquatic habitat (consumptive use over 10%)
- Reduction in availability of groundwater from confined aquifers due to declining water levels.
- Reduction in availability of groundwater from fractured rock aquifers
- Reduction in available water storage during a drought due to increased evaporative rates
- Reduction of water quality and/or impacts to infrastructure as a result of sea level rise.
- Excessive and/or lack of regular assessment of non-revenue (unaccounted) water
- One or more sole source systems and/or limited or insufficient system interconnections/redundancy

## HB542 Change

§ 62.1-44.38.B.2 “...*The Department shall (i) ensure that localities coordinate sufficiently in the development of regional water plans; (ii) provide planning, policy, and technical assistance to each regional planning area, differentiated according to each area's water supply challenges, existing resources, and other factors; and (iii) ensure that each regional plan clearly identifies the region's water supply risks and proposes strategies to address those risks.*”

## Next Meeting(s)

- December 6
- January 6 (if needed)